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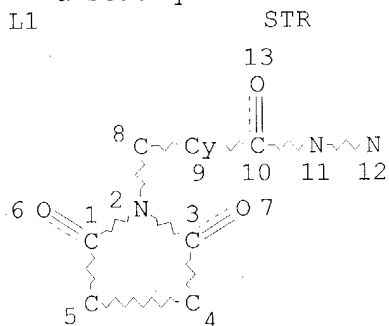
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 FILE LAST UPDATED: 6 Jul 2003 (20030706/ED)

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 DEFAULT ECLEVEL IS LIMITED

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STEREO ATTRIBUTES: NONE
 L3 10 SEA FILE=REGISTRY SSS FUL L1
 L4 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L3

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=> d ibib abs hitstr 14 1-13

L4 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2002:298807 HCAPLUS
 DOCUMENT NUMBER: 136:400166
 TITLE: Constructing an adenocarcinoma vaccine: Immunization

AUTHOR(S): of mice with synthetic KH-1 nonasaccharide stimulates anti-KH-1 and anti-Ley antibodies
 Ragupathi, Govindaswami; Deshpande, Prashant P.; Coltart, Don M.; Kim, Hyunjin M.; Williams, Lawrence J.; Danishefsky, Samuel J.; Livingston, Philip O.
 CORPORATE SOURCE: Laboratory of Tumor Vaccinology, Department of Medicine, Memorial Sloan-Kettering Cancer Center, New York, NY, USA
 SOURCE: International Journal of Cancer (2002), 99(2), 207-212
 CODEN: IJCNW; ISSN: 0020-7136
 PUBLISHER: Wiley-Liss, Inc.
 DOCUMENT TYPE: Journal
 LANGUAGE: English

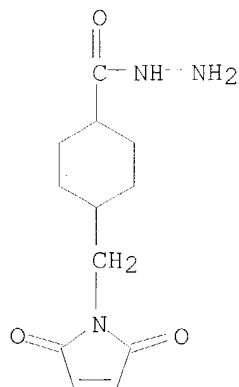
AB There is mounting evidence to suggest that immunization-based strategies can be used to mobilize the human immune system against specific carbohydrate antigens displayed on the surface of cancer cells. Following isolation and identification, such antigens can be administered as conjugate vaccines. The tumor-assocd. carbohydrate antigen KH-1 is 1 such antigen and may serve as a potential target for immunization against adenocarcinoma. However, a serious impediment to the application of a vaccine-based approach involving this antigen is that its availability from natural sources is severely limited. In order to overcome this limitation, the authors have developed an efficient total synthesis of this complex glycolipid. The authors have extended the synthesis to reach a structurally related analog in which the ceramide portion of KH-1 is replaced with an allyl substituent. These synthetic advances have led to the prepn. of 2 potential vaccine constructs, each based on the conjugation of the KH-1 nonasaccharide and the carrier protein keyhole limpet hemocyanin (KLH). In 1 construct (KH-1-Et-KLH), the nonasaccharide is conjugated to KLH via a simple Et linkage, while in the other (KH-1-MMCCCH-KLH), conjugation is mediated by a 4-(4-N-maleimidomethyl)cyclohexane-1-carboxyl hydrazide (MMCCCH) cross-linker. The authors report here the immunol. properties of these 2 constructs. Mice were immunized with either of the 2 KH-1-KLH vaccine candidates or the KH-1 ceramide, along with the immunol. adjuvant QS-21. Immunization with the ceramide served as a neg. control and, as expected, failed to stimulate the prodn. of antibodies against the KH-1 glycolipid. The construct in which the KH-1 nonasaccharide is linked to KLH via a simple alkyl chain stimulated significant quantities of IgM antibodies, whereas the construct linked to KLH by MMCCCH induced high titers of both IgM and IgG antibodies. Inhibition data demonstrated that antibodies generated in response to immunization with the KH-1-KLH constructs recognize not only the KH-1 antigen but also the Lewisy (Ley) antigen, which, from a structural perspective, is similar to the 4 residues located at the non-reducing end of the KH-1 nonasaccharide. Thus, the KH-1-KLH constructs elicit an immune response that successfully targets 2 adenocarcinoma markers. As assessed by FACS anal., the antibodies raised were strongly reactive with the KH-1/Ley pos. cell line MCF-7 but not with KH-1 and Ley neg. melanoma cell lines. Based on the results of this study, a KH-1-KLH plus QS-21 vaccine is being prepd. for clin. evaluation.

IT 181148-00-5

RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (for conjugation of KH-1 nonasaccharide to keyhole limpet hemocyanin carrier)

RN 181148-00-5 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]-, hydrazide (9CI) (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:435302 HCAPLUS

DOCUMENT NUMBER: 135:41770

TITLE: Silanized nucleic acids for immobilization on glass and silicon surfaces

INVENTOR(S): Liang, Zicai; Kumar, Anil

PATENT ASSIGNEE(S): Karolinska Innovations Ab, Swed.

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001042501	A1	20010614	WO 2000-SE2446	20001206
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RW:				
GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1235937	A1	20020904	EP 2000-983641	20001206
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.:

SE 1999-4506 A 19991209

US 1999-170208P P 19991210

WO 2000-SE2446 W 20001206

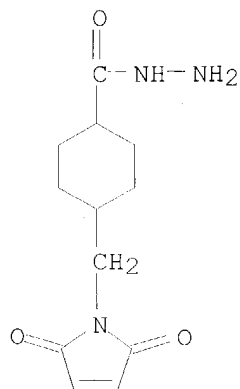
AB A method for immobilization of nucleic acids onto glass and silicon surfaces is described, wherein said nucleic acids are immobilized onto unmodified glass and other silicon surfaces. A new class of modified nucleic acids, namely silanized nucleic acids, and methods of prepg. such modified nucleic acids, as well as a method for producing DNA chips of various d. with only end-attachment of DNA applied, are also described. Thus, 3 methods of silanizing nucleic acids are described. According to the first method, groups on the silanizing agent and the nucleic acid react to form a bond. In the second method, a coupling agent is used to form the bond. By the third method, linkages are formed with acrylic groups on the silanizing agent and the nucleic acid.

IT 174422-72-1

RL: RCT (Reactant); RACT (Reactant or reagent)
 (bifunctional crosslinker; silanized nucleic acids for immobilization
 on glass and silicon surfaces)

RN 174422-72-1 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]-, hydrazide, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:150972 HCAPLUS

DOCUMENT NUMBER: 135:13979

TITLE: In vitro and in vivo efficacy of acid-sensitive
 transferrin and albumin doxorubicin conjugates in a
 human xenograft panel and in the MDA-MB-435 mamma
 carcinoma model

AUTHOR(S): Kratz, Felix; Roth, Thomas; Fichiner, Iduna;
 Schumacher, Peter; Fiebig, Heinz H.; Unger, Clemens

CORPORATE SOURCE: Department of Medical Oncology, Clinical Research,
 Tumor Biology Center, Freiburg, 79106, Germany

SOURCE: Journal of Drug Targeting (2000), 8(5), 305-318
 CODEN: JDTAEH; ISSN: 1061-186X

PUBLISHER: Harwood Academic Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Acid-sensitive transferrin and albumin conjugates with doxorubicin have recently been developed with the aim of circumventing the systemic toxicity and improving the therapeutic efficacy of this anticancer agent. The in vitro activity of two acid-sensitive transferrin and albumin doxorubicin conjugates and free doxorubicin was evaluated in twelve human tumor xenografts using a clonogenic assay. The inhibitory effects and the activity profile of the conjugates was, in general, comparable to that of doxorubicin (mean IC70-value for doxorubicin .apprxeq. 0.1 .mu.M and 0.1-0.4 .mu.M for the conjugates). Subsequently, the efficacy of an acid-sensitive transferrin and albumin doxorubicin conjugate, which both incorporated a phenylacetyl hydrazone bond as a predetd. breaking point, was evaluated in the xenograft mamma carcinoma model MDA-MB-435 in comparison to free doxorubicin (dose, i.v.: 2.times.4, 8 and 12 mg/kg). The conjugates showed significantly reduced toxicity (reduced lethality

and body wt. loss) with a concomitantly stable or slightly improved antitumor activity compared to free doxorubicin. At the dose of 12 mg/kg mortality was unacceptably high in the doxorubicin treated group (.apprxeq.80%); in contrast, no mortality was obsd. with the conjugate treated animals with body wt. loss < 10%. In a further expt., therapy with the acid-sensitive doxorubicin albumin conjugate at 3.times.12 mg/kg in the MDA-MB-435 model resulted in a significantly improved antitumor activity over free doxorubicin at its optimal dose of 2.times.8 mg/kg. In conclusion, acid-sensitive transferrin and albumin doxorubicin conjugates can be administered at higher doses than free doxorubicin in nude mice models with a concomitant improvement in antitumor activity. Interestingly, there is no pronounced difference between identically constructed transferrin and albumin doxorubicin conjugates with regard to in vitro or in vivo efficacy.

IT 342607-00-5D, albumin and transferrin conjugates

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(in vitro and in vivo efficacy of acid-sensitive transferrin and albumin doxorubicin conjugates in a human xenograft panel and in MDA-MB-435 mamma carcinoma model in relation to toxicity)

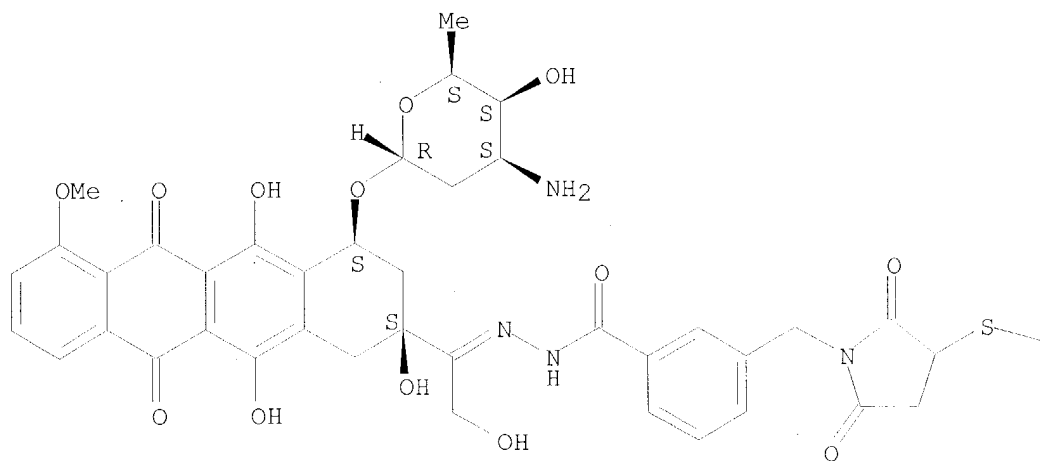
RN 342607-00-5 HCAPLUS

CN Benzoic acid, 3-[[[3-[(4-amino-4-iminobutyl)thio]-2,5-dioxo-1-pyrrolidinyl)methyl]-, [1-[(2S,4S)-4-[(3-amino-2,3,6-trideoxy-.alpha.-L-lyxo-hexopyranosyl)oxy]-1,2,3,4,6,11-hexahydro-2,5,12-trihydroxy-7-methoxy-6,11-dioxo-2-naphthacenyl]-2-hydroxyethylidene]hydrazide, monohydrochloride (9CI) (CA INDEX NAME)

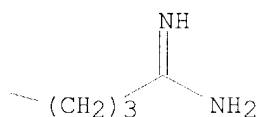
Absolute stereochemistry.

Double bond geometry unknown.

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● HCl



REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:234766 HCAPLUS

DOCUMENT NUMBER: 133:43736

TITLE: Allylmalonamide as a bivalent linker: synthesis of biantennary GM3-saccharide-Keyhole limpet hemocyanin glycoconjugate and the immune response in mice
AUTHOR(S): Zou, Wei; Abraham, Mary; Gilbert, Michel; Wakarchuk, Warren W.; Jennings, Harold J.

CORPORATE SOURCE: Institute for Biological Sciences, National Research Council of Canada, Ottawa, ON, K1A 0R6, Can.

SOURCE: Glycoconjugate Journal (2000), Volume Date 1999, 16(9), 507-515

CODEN: GLJOEW; ISSN: 0282-0080

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 133:43736

AB A biantennary GM3-saccharide (sialyllactoside) deriv. was constructed using allylmalonic acid as a bivalent linker, both carboxylic acids of which were condensed with 3-aminopropyl lactoside prior to enzymic sialylation with a fusion enzyme. The av. ratios of saccharide to protein were obsd. to be 35 in KLH conjugate and 9-12 in HSA conjugates. The antisera obtained by immunizing mice with the biantennary sialyllactoside-KLH conjugate together with MPL adjuvant were analyzed by ELISA. Using several structurally related saccharide-HSA conjugates as screening antigens, it was concluded that anti-sialyllactoside antibodies, both IgG and IgM, were effectively raised. This was further supported by competitive inhibition expts. using lactoside, sialyllactoside and biantennary sialyllactoside as inhibitors.

IT 274260-28-5DP, human serum albumin and keyhole limpet hemocyanin bound

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(allylmalonamide as a bivalent linker synthesis of biantennary GM3-saccharide-keyhole limpet hemocyanin glycoconjugate and the immune response in mice)

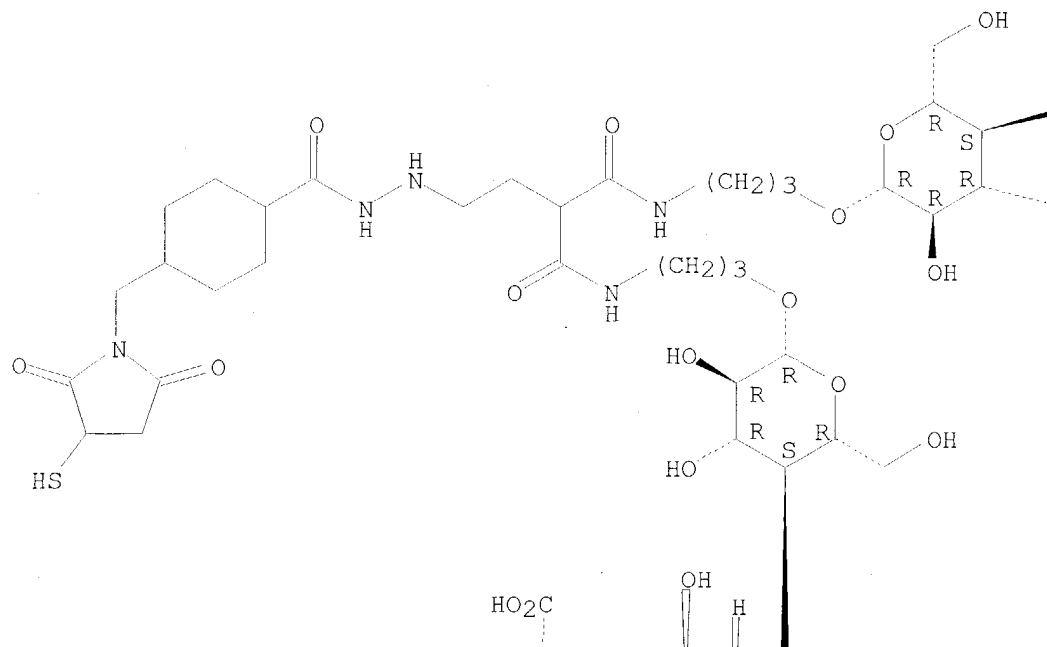
RN 274260-28-5 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-[(3-mercapto-2,5-dioxo-1-pyrrolidinyl)methyl]-, 2-[4-[[3-[[O-(N-acetyl-.alpha.-neuraminosyl)-(2.fwdarw.3)-O-.beta.-D-galactopyranosyl-(1.fwdarw.4)-.beta.-D-glucopyranosyl]oxy]propyl]amino]-3-[[[3-[[O-(N-acetyl-.alpha.-

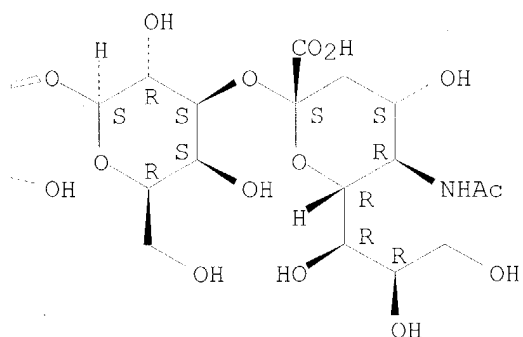
neuraminosyl)-(2.fwdarw.3)-O-.beta.-D-galactopyranosyl-(1.fwdarw.4)-.beta.-
D-glucopyranosyl]oxy]propyl]amino]carbonyl]-4-oxobutyl]hydrazide (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

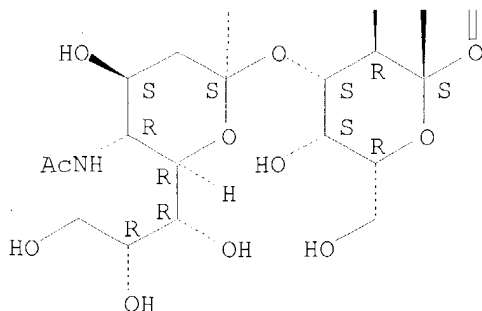
PAGE 1-A



PAGE 1-B



PAGE 2-A



IT 274260-27-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

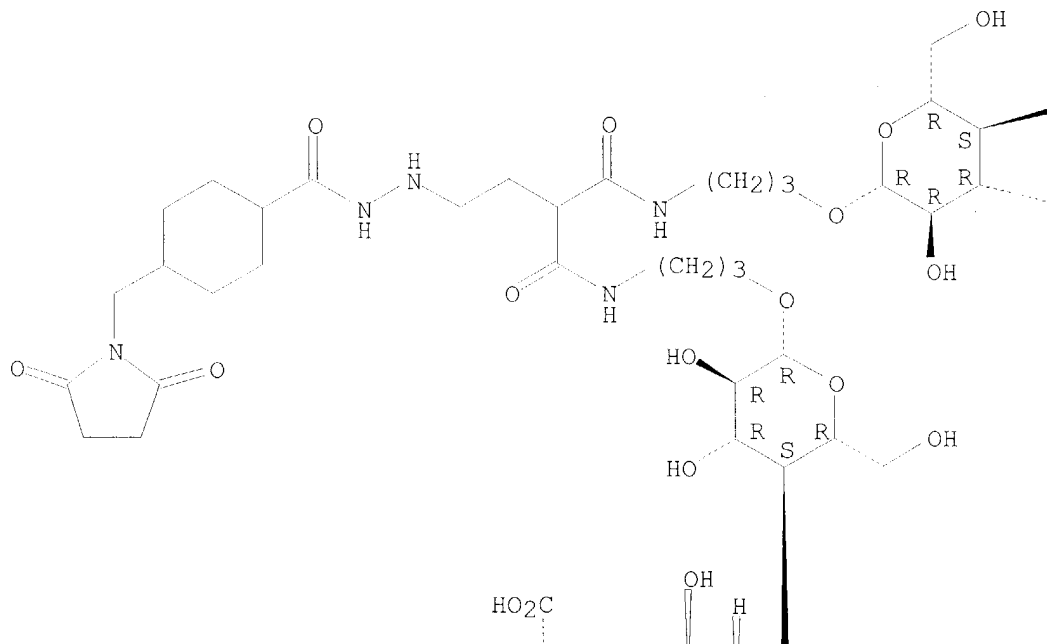
(allylmalonamide as a bivalent linker synthesis of biantennary GM3-saccharide-keyhole limpet hemocyanin glycoconjugate and the immune response in mice)

RN 274260-27-4 HCAPLUS

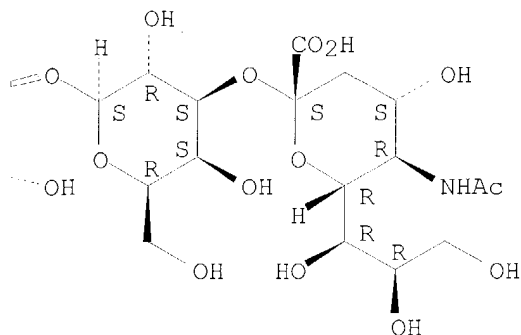
CN Cyclohexanecarboxylic acid, 4-[(2,5-dioxo-1-pyrrolidinyl)methyl]-, 2-[4-[[3-[[O-(N-acetyl-.alpha.-neuraminosyl)-(2.fwdarw.3)-O-.beta.-D-galactopyranosyl-(1.fwdarw.4)-.beta.-D-glucopyranosyl]oxy]propyl]amino]-3-[[[3-[[O-(N-acetyl-.alpha.-neuraminosyl)-(2.fwdarw.3)-O-.beta.-D-galactopyranosyl-(1.fwdarw.4)-.beta.-D-glucopyranosyl]oxy]propyl]amino]carbonyl]-4-oxobutyl]hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

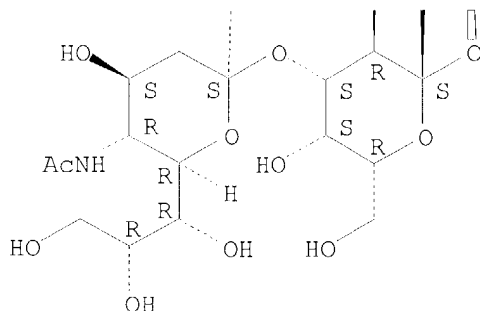
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REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:68360 HCAPLUS

DOCUMENT NUMBER: 132:127703

TITLE: Water-soluble geldanamycin derivatives and methods for their production and cancer treatment

INVENTOR(S): Ho, David K.; Mandler, Raya; Alvarado-Lindner, Ada Belinda; Upadhyay, Kaye B. Dillah; Newman, David J.

PATENT ASSIGNEE(S): United States Dept. of Health and Human Services, USA

SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000003737	A2	20000127	WO 1999-US16199	19990715
WO 2000003737	A3	20000420		

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RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,

ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 CA 2338000 AA 20000127 CA 1999-2338000 19990715
 AU 9951091 A1 20000207 AU 1999-51091 19990715
 EP 1098666 A2 20010516 EP 1999-935659 19990715
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO
 JP 2002520369 T2 20020709 JP 2000-559871 19990715

PRIORITY APPLN. INFO.:

US 1998-93284P P 19980717
 WO 1999-US16199 W 19990715

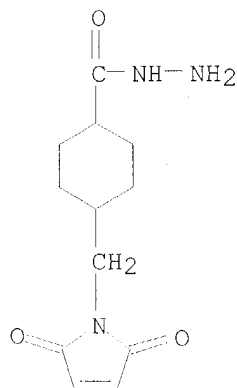
AB The present invention provides water-sol. drugs, in particular, water-sol. analogs of geldanamycin, and compns. comprising the same. This invention also provides a method of rendering water-insol. drugs sol. in water through derivatization with a bifunctional linking mol. and subsequent conjugation to a polar moiety through a thio ether. The present invention further provides a method of treating cancer in a mammal. Thus, 17-GMB-aminopropylaminogeldanamycin (prepn. given) was reacted with L-cysteine to give 17-cys-GMB-aminopropylaminogeldanamycin which was water sol. Growth inhibitory efficacy of sol. geldanamycin derivs. against cancer cells is shown.

IT 174422-72-1

RL: RCT (Reactant); RACT (Reactant or reagent)
 (water-sol. geldanamycin derivs. and methods for their prodn. and cancer treatment)

RN 174422-72-1 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]-, hydrazide, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L4 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:9442 HCAPLUS

DOCUMENT NUMBER: 132:170955

TITLE: Acid-sensitive polyethylene glycol conjugates of doxorubicin: preparation, in vitro efficacy and intracellular distribution

AUTHOR(S): Rodrigues, Paula C. A.; Beyer, Ulrich; Schumacher, Peter; Roth, Thomas; Fiebig, Heinz H.; Unger, Clemens; Messori, Luigi; Orioli, PierLuigi; Paper, Dietrich H.; Mulhaupt, Rolf; Kratz, Felix

CORPORATE SOURCE: Department of Medical Oncology, Clinical Research, Tumor Biology Center, Freiburg, 79106, Germany

SOURCE: Bioorganic & Medicinal Chemistry (1999), 7(11),
2517-2524
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Coupling anticancer drugs to synthetic polymers is a promising approach of enhancing the antitumor efficacy and reducing the side-effects of these agents. Doxorubicin maleimide derivs. contg. an amide or acid-sensitive hydrazone linker were therefore coupled to .alpha.-methoxy-poly(ethylene glycol)-thiopropionic acid amide (MW 20000 Da), .alpha.,.omega.-bis-thiopropionic acid amide poly(ethylene glycol) (MW 20000 Da) or .alpha.-tert-butoxy-poly(ethylene glycol)-thiopropionic acid amide (MW 70000 Da) and the resulting polyethylene glycol (PEG) conjugates isolated through size-exclusion chromatog. The polymer drug derivs. were designed as to release doxorubicin inside the tumor cell by acid-cleavage of the hydrazone bond after uptake of the conjugate by endocytosis. The acid-sensitive PEG conjugates contg. the carboxylic hydrazone bonds exhibited in vitro activity against human BXF T24 bladder carcinoma and LXFL 529L lung cancer cells with IC70 values in the range 0.02-1.5 .mu.m (cell culture assay: propidium iodide fluorescence or colony forming assay). In contrast, PEG doxorubicin conjugates contg. an amide bond between the drug and the polymer showed no in vitro activity. Fluorescence microscopy studies in LXFL 529 lung cancer cells revealed that free doxorubicin accumulates in the cell nucleus whereas doxorubicin of the acid-sensitive PEG doxorubicin conjugates is primarily localized in the cytoplasm. Nevertheless, the acid-sensitive PEG doxorubicin conjugates retain their ability to bind to calf thymus DNA as shown by fluorescence and visible spectroscopy studies. Results regarding the effect of an acid-sensitive PEG conjugate of mol. wt. 20000 in the chorioallantoic membrane (CAM) assay indicate that this conjugate is significantly less embryotoxic than free doxorubicin although antiangiogenic effects were not obsd.

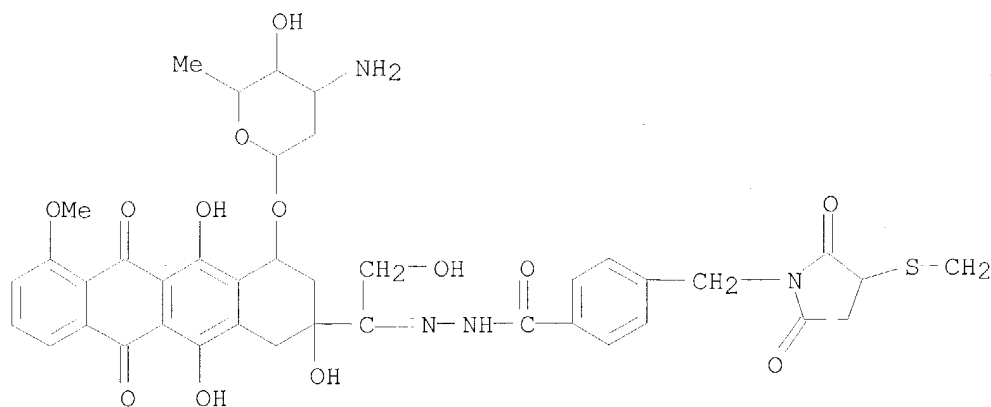
IT **258844-02-9P 258844-03-0P**

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(acid-sensitive polyethylene glycol conjugates of doxorubicin: prepn., in vitro efficacy and intracellular distribution)

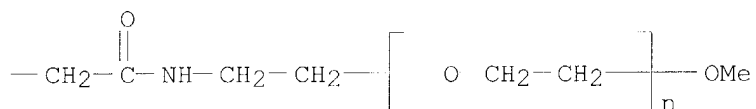
RN 258844-02-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[[3-[[1-[[4-[[2-[1-[(2S,4S)-4-[(3-amino-2,3,6-trideoxy-.alpha.-L-lyxo-hexopyranosyl)oxy]-1,2,3,4,6,11-hexahydro-2,5,12-trihydroxy-7-methoxy-6,11-dioxo-2-naphthacenyl]-2-hydroxyethylidene]hydrazino]carbonyl]phenyl]methyl]-2,5-dioxo-3-pyrrolidinyl]thio]-1-oxopropyl]amino]ethyl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

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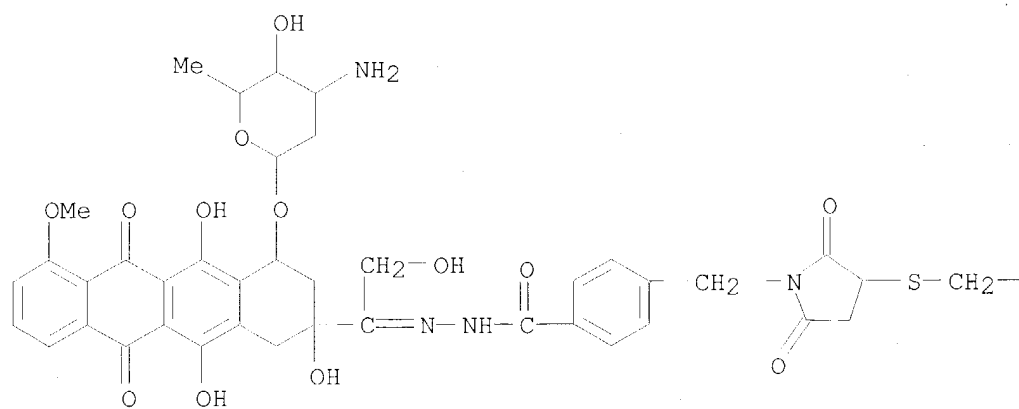
PAGE 1-B



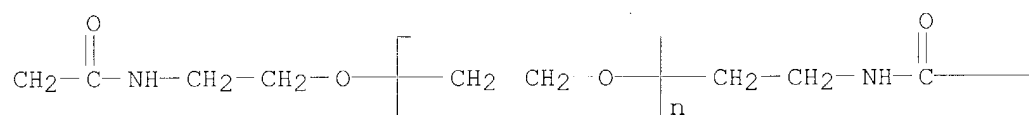
RN 258844-03-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[[3-[[1-[[4-[[2-[1-[(2S,4S)-4-[(3-amino-2,3,6-trideoxy-.alpha.-L-lyxo-hexopyranosyl)oxy]-1,2,3,4,6,11-hexahydro-2,5,12-trihydroxy-7-methoxy-6,11-dioxo-2-naphthacenyl]-2-hydroxyethylidene]hydrazino]carbonyl]phenyl]methyl]-2,5-dioxo-3-pyrrolidinyl]thio]-1-oxopropyl]amino]ethyl]-.omega.-[2-[[3-[[1-[[4-[[2-[1-[(2S,4S)-4-[(3-amino-2,3,6-trideoxy-.alpha.-L-lyxo-hexopyranosyl)oxy]-1,2,3,4,6,11-hexahydro-2,5,12-trihydroxy-7-methoxy-6,11-dioxo-2-naphthacenyl]-2-hydroxyethylidene]hydrazino]carbonyl]phenyl]methyl]-2,5-dioxo-3-pyrrolidinyl]thio]-1-oxopropyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

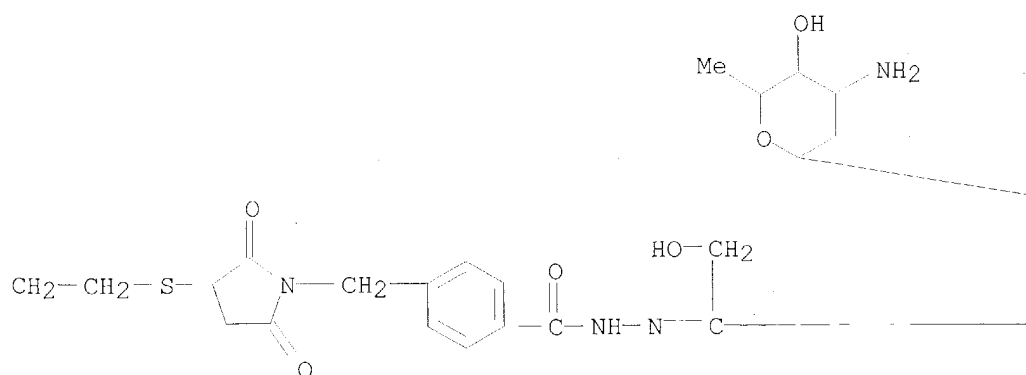
PAGE 1-A

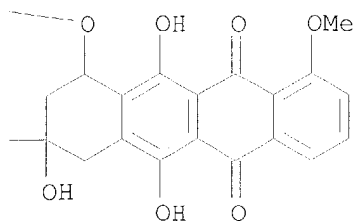


PAGE 1-B



PAGE 1-C





REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:332718 HCAPLUS

DOCUMENT NUMBER: 131:143211

TITLE: Vaccines prepared with sialyl-Tn and sialyl-Tn trimers using the 4-(4-maleimidomethyl)cyclohexane-1-carboxyl hydrazide linker group result in optimal antibody titers against ovine submaxillary mucin and sialyl-Tn-positive tumor cells

AUTHOR(S): Ragupathi, Govindaswami; Howard, Lisa; Cappello, Sarah; Koganty, R. Rao; Qiu, Dongxu; Longenecker, B. Michael; Reddish, Mark A.; Lloyd, Kenneth O.; Livingston, Philip O.

CORPORATE SOURCE: Clinical Immunology Service, Department of Medicine, Memorial Sloan-Kettering Cancer Center, New York, NY, 10021, USA

SOURCE: Cancer Immunology Immunotherapy (1999), 48(1), 1-8
CODEN: CIIMDN; ISSN: 0340-7004

PUBLISHER: Springer-Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Sialyl-Tn (STn) is an O-serine- or O-threonine-linked disaccharide [NeuAc.alpha.(2.fwdarw.6)GalNAc.alpha.-O-Ser/Thr] expressed on mucins of most types of adenocarcinoma as single STn or clustered STn [STn(c)] epitopes. Though STn is expressed on some normal tissues it is relatively tumor-specific, esp. in the clustered conformation. Clin. trials with STn-keyhole limpet hemocyanin (KLH) conjugate vaccines, prepd. using reductive amination with a two-carbon linker group, have resulted in high titers against STn but lower titers against natural forms of STn (ovine submaxillary mucin, or tumor cells). To obtain antibodies of more appropriate specificity, the authors attempted to prep. STn(c)-KLH conjugates to establish their immunogenicity in mice in prepn. for clin. trials; however, conjugation efficiency was poor when the same 2-carbon linker was used, presumably because of steric hindrance. STn-KLH and STn(c)-KLH conjugates were prepd. using the regular 2-carbon or the recently developed more efficient longer heterobifunctional 4-(4-maleimidomethyl)cyclohexane-1-carboxyl hydrazide (MMCCH) linkers, and the resulting immunogenicities in mice were compared. The highest titers against STn were seen with the STn-KLH conjugate with the 2-carbon linker, and the highest titers against STn(c) were seen with STn(c)-KLH with the MMCCH linker. Conjugation with MMCCH resulted in the highest conjugation efficiency (yield) and the highest titers against ovine submaxillary mucin

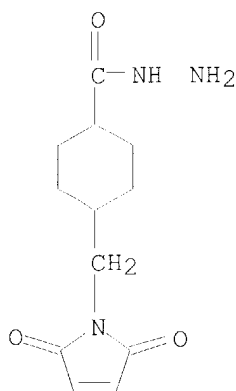
and STn-pos. tumor cells, and is the method of choice for the prepn. of STn(c) vaccine for clin. trials.

IT 181148-00-5

RL: BSU (Biological study, unclassified); BIOL (Biological study) (linker; vaccines prepd. with sialyl-Tn and sialyl-Tn trimers using linker group result in optimal antibody titers against ovine mucin and sialyl-Tn-pos. tumor cells)

RN 181148-00-5 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]-, hydrazide (9CI) (CA INDEX NAME)



REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:235657 HCAPLUS

DOCUMENT NUMBER: 129:3682

TITLE: A novel and efficient method for synthetic carbohydrate conjugate vaccine preparation: synthesis of sialyl Tn-KLH conjugate using a 4-(4-N-maleimidomethyl) cyclohexane-1-carboxyl hydrazide (MMCCH) linker arm

AUTHOR(S): Ragupathi, Govindaswami; Koganty, R. Rao; Qiu, Dongxu; Lloyd, Kenneth O.; Livingston, Philip O.

CORPORATE SOURCE: Clinical Immunology Service, Memorial Hospital, New York, NY, 10021, USA

SOURCE: Glycoconjugate Journal (1998), 15(3), 217-221
CODEN: GLJOEW; ISSN: 0282-0080

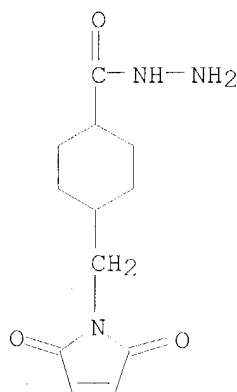
PUBLISHER: Chapman & Hall

DOCUMENT TYPE: Journal

LANGUAGE: English

AB STn (NeuAc.alpha.2.fwdarw.6GalNAc.alpha.-O-Ser/Thr) is a carbohydrate epitope overexpressed in various human carcinomas. Clin. trials are underway using synthetic STn or STn trimeric glycopeptides [STn, cluster; STn(c)] conjugated with keyhole limpet hemocyanin (KLH) as active specific immunotherapy for these cancers. These vaccines have been prepd. by conjugating a crotyl Et amide deriv. of STn or STn(c) to KLH by direct reductive amination after ozonolysis. In the case of STn(c) the conjugation efficiency and the resulting epitope ratios were low. This may be due to steric hindrance of the short spacer arm. To overcome these difficulties, without resynthesis, the STn(c) glycopeptide was modified by attachment of an MMCCH (4-(4-N-maleimidomethyl) cyclohexane-1-carboxyl hydrazide) spacer arm to the aldehyde deriv., and then conjugated with thiolated KLH. This method gave a higher epitope ratio and yield than the direct method. The STn(c)-MMCCH-KLH conjugate induced high titer antibodies in mice against STn(c). This method may be generally

applicable for large synthetic oligosaccharides.
 IT **174422-72-1**
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (as spacer arm in sialyl Tn carcinoma vaccine)
 RN 174422-72-1 HCAPLUS
 CN Cyclohexanecarboxylic acid, 4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]-, hydrazide, monohydrochloride (9CI) (CA INDEX NAME)

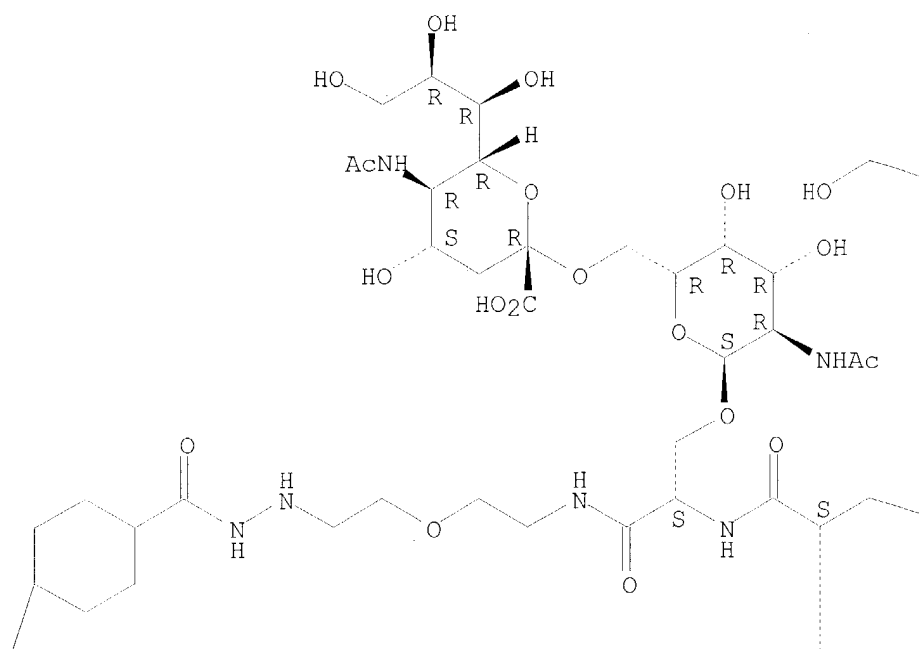


● HCl

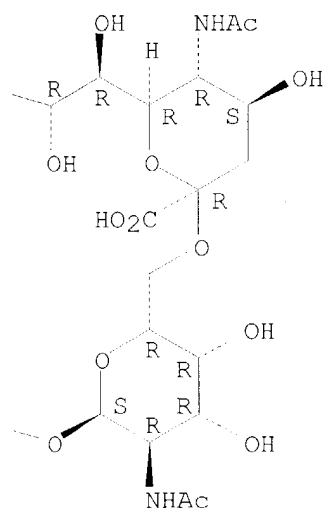
IT **207503-53-5DP**, keyhole limpet hemocyanin conjugates
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (immunogenicity of in carcinoma vaccine)
 RN 207503-53-5 HCAPLUS
 CN L-Serinamide, N-acetyl-O-[2-(acetilamino)-6-O-(N-acetyl-.alpha.-neuraminosyl)-2-deoxy-.alpha.-D-galactopyranosyl]-L-seryl-O-[2-(acetilamino)-6-O-(N-acetyl-.alpha.-neuraminosyl)-2-deoxy-.alpha.-D-galactopyranosyl]-L-seryl-O-[2-(acetilamino)-6-O-(N-acetyl-.alpha.-neuraminosyl)-2-deoxy-.alpha.-D-galactopyranosyl]-N-[2-[2-[2-[4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]carbonyl]hydrazino]ethoxy]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

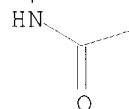
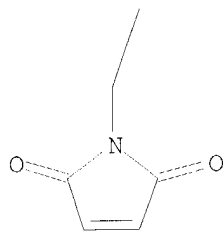
PAGE 1-A



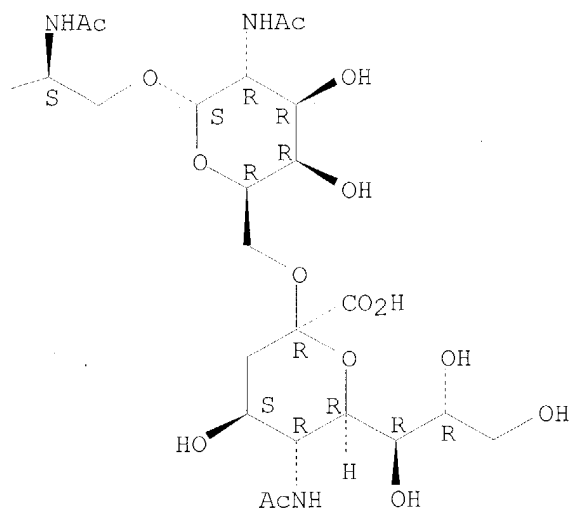
PAGE 1-B



PAGE 2-A



PAGE 2-B



IT 207503-53-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

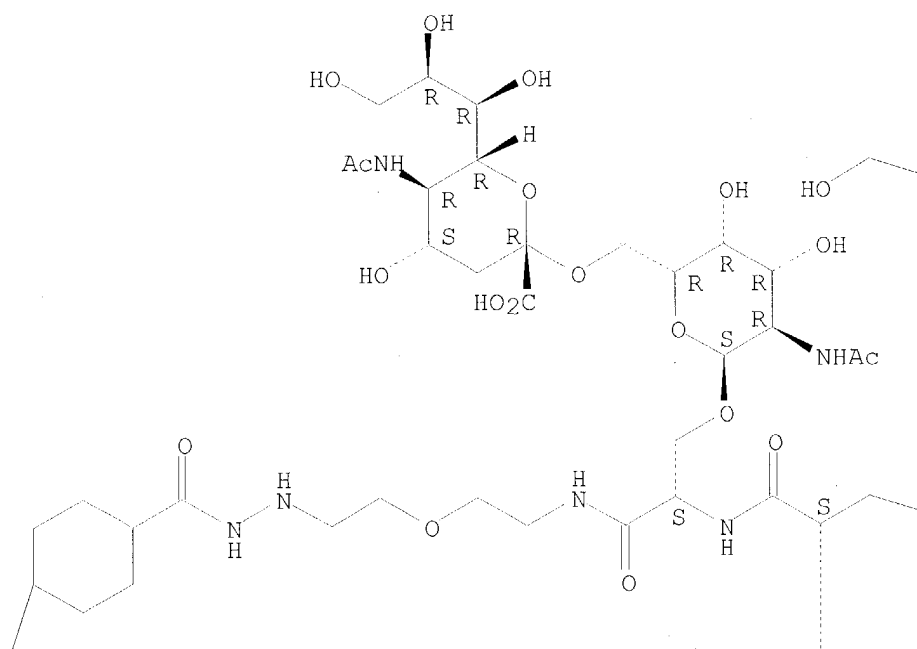
(prepn. of and conjugation to keyhole limpet hemocyanin)

RN 207503-53-5 HCAPLUS

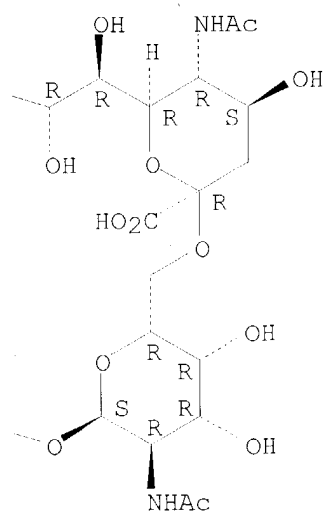
CN L-Serinamide, N-acetyl-O-[2-(acetyl-amino)-6-O-(N-acetyl-.alpha.-neuraminosyl)-2-deoxy-.alpha.-D-galactopyranosyl]-L-seryl-O-[2-(acetyl-amino)-6-O-(N-acetyl-.alpha.-neuraminosyl)-2-deoxy-.alpha.-D-galactopyranosyl]-L-seryl-O-[2-(acetyl-amino)-6-O-(N-acetyl-.alpha.-neuraminosyl)-2-deoxy-.alpha.-D-galactopyranosyl]-N-[2-[2-[2-[4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]carbonyl]hydrazino]ethoxy]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

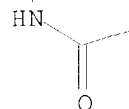
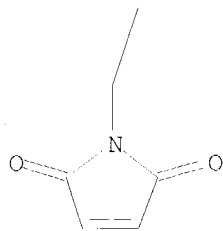
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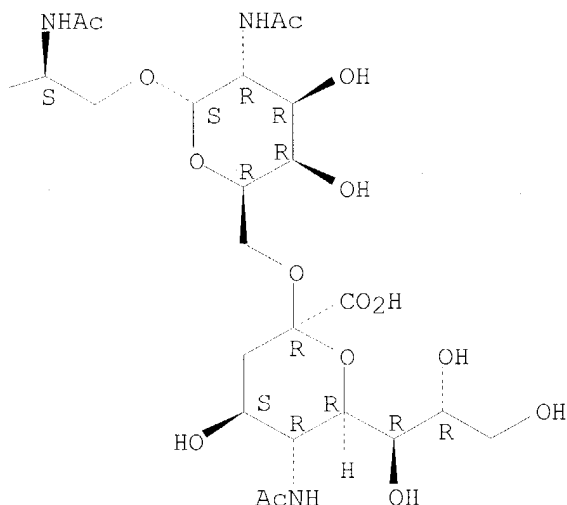
PAGE 1-B



PAGE 2-A



PAGE 2-B



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:129059 HCAPLUS

DOCUMENT NUMBER: 128:203897

TITLE: Immunogenicity of synthetic conjugates of Lewisy oligosaccharide with proteins in mice: towards the design of anticancer vaccines

AUTHOR(S): Kudryashov, Valery; Kim, Hyunjin M.; Ragupathi, Govindaswami; Danishefsky, Samuel J.; Livingston, Philip O.; Lloyd, Kenneth O.

CORPORATE SOURCE: Immunology Program, Memorial Sloan-Kettering Cancer Center, New York, NY, 10021, USA

SOURCE: Cancer Immunology Immunotherapy (1998), 45(6), 281-286
CODEN: CIIMDN; ISSN: 0340-7004

PUBLISHER: Springer-Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Many human carcinomas overexpress the Lewisy (Ley) blood-group epitope [Fuc.alpha.1 .fwdarw. 2Gal.beta.1 .fwdarw. 4 (Fuc.alpha.1 .fwdarw. 3)GlcNAc.beta.1 .fwdarw. 3Gal-]. With a view to developing Ley based vaccines we have examd. the immunogenicity of Ley-protein conjugates in mice. Ley pentasaccharide was synthesized as its allyl glycoside and coupled to keyhole limpet hemocyanin (KLH) by reductive amination or by a novel method utilizing a maleido-derivatized alkyl carboxyhydrazide as a bridging group to 2-iminothiolane-derivatized KLH. Ley oligosaccharide

was also coupled to bovine serum albumin by reductive amination. Immunization of groups of mice with the three conjugates, together with the immunol. adjuvant QS21, showed that Ley oligosaccharide directly coupled to KLH was the most efficient conjugate for eliciting IgG and IgM antibody responses to naturally occurring forms of Ley epitopes carried on mucins and glycolipids. These antibodies were also reactive with and cytotoxic to a human breast cancer cell line expressing Ley (MCF-7). These expts. suggest that Ley-KLH antigen and QS21 adjuvant could be considered as an immunogenic therapeutic vaccine in carcinoma patients.

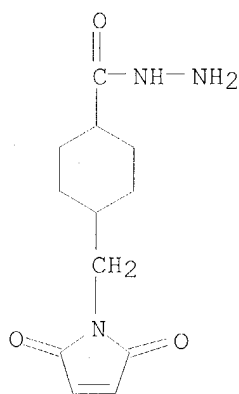
IT 181148-00-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(Ley pentasaccharide coupling with)

RN 181148-00-5 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]-, hydrazide (9CI) (CA INDEX NAME)



REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:43704 HCAPLUS

DOCUMENT NUMBER: 128:152804

TITLE: Antibody immobilization using heterobifunctional crosslinkers

AUTHOR(S): Shriver-Lake, Lisa C.; Donner, Brian; Edelstein, Rebecca; Breslin, Kristen; Bhatia, Suresh K.; Ligler, France S.

CORPORATE SOURCE: Center for Bio/Molecular Science and Engineering, Naval Research Laboratory, Washington, DC, 20375-5348, USA

SOURCE: Biosensors & Bioelectronics (1997), 12(11), 1101-1106
CODEN: BBIOE4; ISSN: 0956-5663

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Covalent attachment of functional proteins to a solid support is important for biosensors. One method employs thiol-terminal silanes and hetero-bifunctional crosslinkers such as N-succinimidyl 4-maleimidobutylate (GMBS) to immobilize proteins through amino groups onto glass, silica, silicon or platinum surfaces. In this report, several heterobifunctional crosslinkers are compared to GMBS for their ability to immobilize active antibodies onto glass cover slips at a high density. Antibodies were immobilized at densities of 74-220 ng/cm² with high levels of specific antigen binding. Carbohydrate-reactive crosslinkers were also compared to GMBS using a fiber optic biosensor to detect

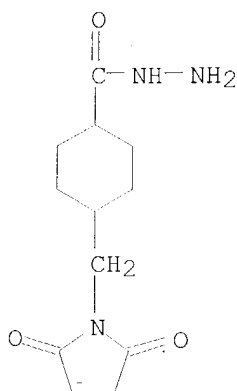
fluorescently-labeled antigen. At the concns. tested, the antibodies immobilized with carbohydrate-reactive crosslinkers bound more antigen than GMBS immobilized antibodies as indicated by the fluorescence signal.

IT 174422-72-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(amine-reactive and carbohydrate-reactive heterobifunctional crosslinkers in immobilization of antibodies)

RN 174422-72-1 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]-, hydrazide, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:563494 HCAPLUS

DOCUMENT NUMBER: 125:189998

TITLE: Immunoenzymic conjugate and its preparation and uses

INVENTOR(S): Cucurou, Christophe; Cognet, Gilles; Gadelle, Stephane; Le Sager, Carine

PATENT ASSIGNEE(S): Pasteur Sanofi Diagnostics, Fr.

SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9623226	A1	19960801	WO 1996-FR113	19960123
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE				
FR 2729760	A1	19960726	FR 1995-735	19950123
FR 2729760	B1	19970814		
FR 2734365	A1	19961122	FR 1995-5939	19950518
FR 2734365	B1	19990409		

CA 2184636	AA	19960801	CA 1996-2184636	19960123
AU 9646260	A1	19960814	AU 1996-46260	19960123
AU 707172	B2	19990701		
EP 752102	A1	19970108	EP 1996-901840	19960123
EP 752102	B1	20001115		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE

ZA 9600504	A	19970723	ZA 1996-504	19960123
JP 09511067	T2	19971104	JP 1996-522674	19960123
IL 116863	A1	20000217	IL 1996-116863	19960123
AT 197645	E	20001215	AT 1996-901840	19960123
ES 2153090	T3	20010216	ES 1996-901840	19960123
US 6027874	A	20000222	US 1996-714110	19961122

PRIORITY APPLN. INFO.:

FR 1995-735	A	19950123
FR 1995-5939	A	19950518
WO 1996-FR113	W	19960123

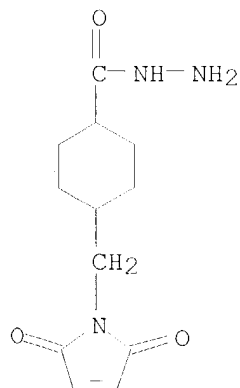
AB An immunoenzymic conjugate is disclosed for, e.g., the diagnosis of virus infections, that consists of copolymeric glycosylated labeling enzymes (e.g., alk. phosphatase or peroxidase) conjugated with substances having immunol. activity, e.g., HIV1 peptide, HIV2 peptide, hepatitis C virus peptide, monoclonal antibody against HIV1, or antibody against hepatitis B surface antigen. The labeling enzyme mols. are copolymd. via their oxidized carbohydrates, and the enzyme copolymer is obtained by using a diamine, e.g., 1,4-phenylenediamine, or different heterobifunctional reagents, e.g., 2-mercaptoethylamine, 3-(2-pyridyldithio)propionyl hydrazide, etc. The enzyme copolymer is coupled to the immunol. substance by using a homo- or heterobifunctional reagent, e.g., bis(sulfosuccinimidyl)suberate, sulfosuccinimidyl-4-(N-maleimidomethyl)cyclohexane-1-carboxylate, or N-succinimidyl-3-(2-pyridyldithio)propionate. The use of such conjugates in diagnostic kits are also disclosed. Examples are given of the prepn. of conjugates of alk. phosphatase or peroxidase with a peptide from glycoprotein gp41 of HIV1, of a conjugate of peroxidase with monoclonal antibody against HIV1, of a conjugate of peroxidase with antibody against hepatitis B surface antigen, etc., and of their use in immunoassays for detection of the resp. antigens or antibodies.

IT 181148-00-5

RL: ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent); USES (Uses)
(enzyme polymer conjugates prepn. and use in immunoassays)

RN 181148-00-5 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]-, hydrazide (9CI) (CA INDEX NAME)



DOCUMENT NUMBER: 124:212048
 TITLE: Erythropoietin with increased biological activity
 INVENTOR(S): Sytokowski, Arthur J.
 PATENT ASSIGNEE(S): New England Deaconess Hospital, USA
 SOURCE: PCT Int. Appl., 41 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

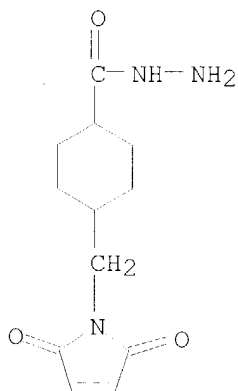
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9525746	A1	19950928	WO 1995-US3242	19950315
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5580853	A	19961203	US 1994-216259	19940322
EP 751959	A1	19970108	EP 1995-912917	19950315
EP 751959	B1	20000105		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AT 188486	E	20000115	AT 1995-912917	19950315
ES 2143620	T3	20000516	ES 1995-912917	19950315
PRIORITY APPLN. INFO.:			US 1994-216259	A 19940322
			WO 1995-US3242	W 19950315

AB Modified polypeptides with increased biol. activity exhibited as either increased potency or prolonged circulating half-life are prepd. by crosslinking their chains through cleavable disulfide groups. Thus, human erythropoietin was derivatized with a SPDP homolog and reduced with DTT to expose .gtoreq.1 SH group. A 2nd portion of native erythropoietin was derivatized with SMCC and mixed with the SH group-contg. erythropoietin to produce erythropoietin dimers and trimers. The dimeric erythropoietin showed increased biol. activity and had an in vivo half-life of >24 h, compared to 7 h for native erythropoietin.

IT **174422-72-1**
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (crosslinked erythropoietin with increased biol. activity)

RN 174422-72-1 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]-, hydrazide, monohydrochloride (9CI) (CA INDEX NAME)

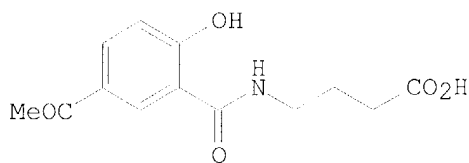


● HCl

ACCESSION NUMBER: 1990:548405 HCAPLUS
 DOCUMENT NUMBER: 113:148405
 TITLE: Targeting substance-diagnostic/therapeutic agent
 conjugates having Schiff base or hydrazone linkages,
 their use, and slow-release carrier-drug
 pharmaceuticals containing them
 INVENTOR(S): Sivam, Gowsala P.; Reed, Michael W.; Srinivasan,
 Ananthachari; Morgan, A. Charles, Jr.; Brixner, Diana
 I.; Vrudhula, Vivekananda M.; Comezoglu, F. Taha
 PATENT ASSIGNEE(S): NeoRx Corp., USA
 SOURCE: PCT Int. Appl., 51 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9003401	A1	19900405	WO 1989-US4267	19890929
W: JP				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
EP 434765	A1	19910703	EP 1989-911718	19890929
EP 434765	B1	19951108		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
US 5066789	A	19911119	US 1989-415154	19890929
JP 04504248	T2	19920730	JP 1989-510891	19890929
CA 2000039	AA	19900331	CA 1989-2000039	19891002
US 5633351	A	19970527	US 1994-332045	19941101
US 5521290	A	19960528	US 1994-342789	19941121
PRIORITY APPLN. INFO.:			US 1988-252298	19880930
			US 1989-415154	19890929
			WO 1989-US4267	19890929
			US 1990-621709	19901204
			US 1991-714806	19910613
			US 1992-987535	19921207
			US 1993-13484	19930201

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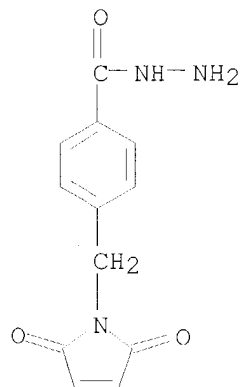
AB The title conjugates comprise e.g. TS-(L1)nC(O)NHN:C(R)(L2)n'-agent (TS is a targeting substance; L1 and L2 are heterobifunctional linkers; n, n' = 0, 1; R = H, alkyl, aryl, alicyclic; agent is a diagnostic or therapeutic agent or chelating agent for binding small therapeutic or diagnostic mols.). Slow-release carrier-drug pharmaceuticals incorporating the conjugates of the invention are described. Thus, tautomeric verrucarin A 2'-hemisuccinoylhydrazide (I) was prepd. from reacting the corresponding succinoylsuccinimide (prepn. given) with H₂NNH₂. I was then reacted with the conjugate of monoclonal antibody NR-LU-10 and an N-hydroxysuccinimide ester of linker II. The resulting conjugate contained 4.4 verrucarin A mols./antibody mol. and displayed 1 log less cytotoxicity than verrucarin A itself.

IT **129506-88-3**
 RL: ANST (Analytical study)

(in conjugate with diagnostic/therapeutic agent and targeting substance
and Schiff base or hydrazone linkage)

RN 129506-88-3 HCAPLUS

CN Benzoic acid, 4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]-, hydrazide
(9CI) (CA INDEX NAME)



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FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

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L1 STR

L3 10 SEA FILE=REGISTRY SSS FUL L1

L5 0 SEA FILE=CAOLD ABB=ON PLU=ON L3

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FILE 'REGISTRY' ENTERED AT 17:37:39 ON 07 JUL 2003

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 6 JUL 2003 HIGHEST RN 543672-54-4
 DICTIONARY FILE UPDATES: 6 JUL 2003 HIGHEST RN 543672-54-4

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

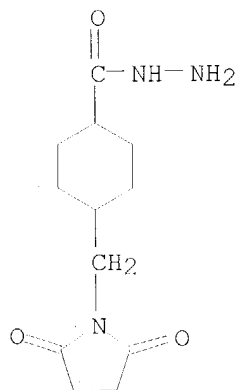
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=> d ide can 13 1-10

L3 ANSWER 1 OF 10 REGISTRY COPYRIGHT 2003 ACS
 RN 359436-59-2 REGISTRY
 CN Cyclohexanecarboxylic acid, 4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]-, hydrazide, mono(trifluoroacetate) (9CI) (CA INDEX NAME)
 MF C12 H17 N3 O3 . C2 H F3 O2
 SR CAS Registry Services
 LC STN Files: CHEMCATS

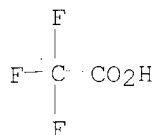
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CRN 181148-00-5
 CMF C12 H17 N3 O3



CM 2

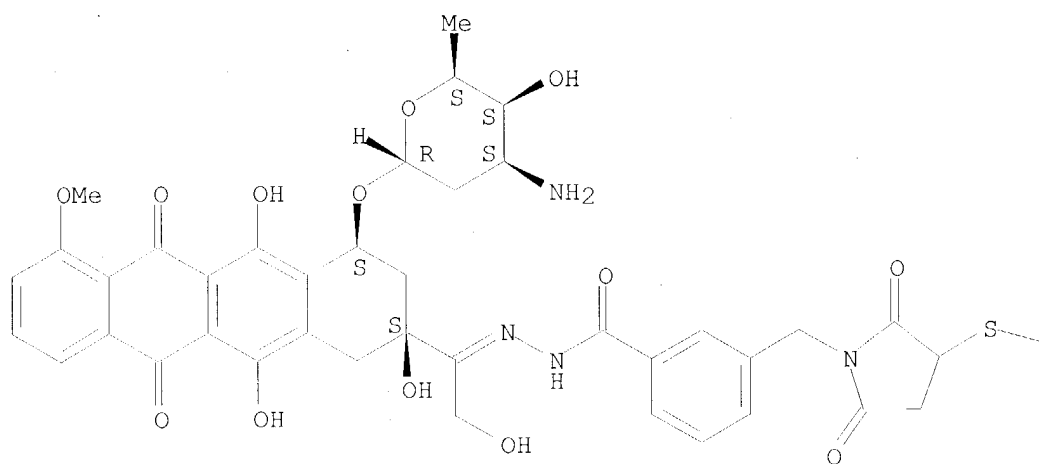
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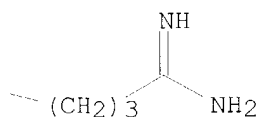
L3 ANSWER 2 OF 10 REGISTRY COPYRIGHT 2003 ACS
 RN 342607-00-5 REGISTRY
 CN Benzoic acid, 3-[[[3-[(4-amino-4-iminobutyl)thio]-2,5-dioxo-1-pyrrolidinyl]methyl]-, [1-[(2S,4S)-4-[(3-amino-2,3,6-trideoxy-.alpha.-L-lyxo-hexopyranosyl)oxy]-1,2,3,4,6,11-hexahydro-2,5,12-trihydroxy-7-methoxy-6,11-dioxo-2-naphthacenyl]-2-hydroxyethylidene]hydrazide, monohydrochloride (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C43 H48 N6 O13 S . Cl H
 SR CA
 LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.
 Double bond geometry unknown.

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● HCl



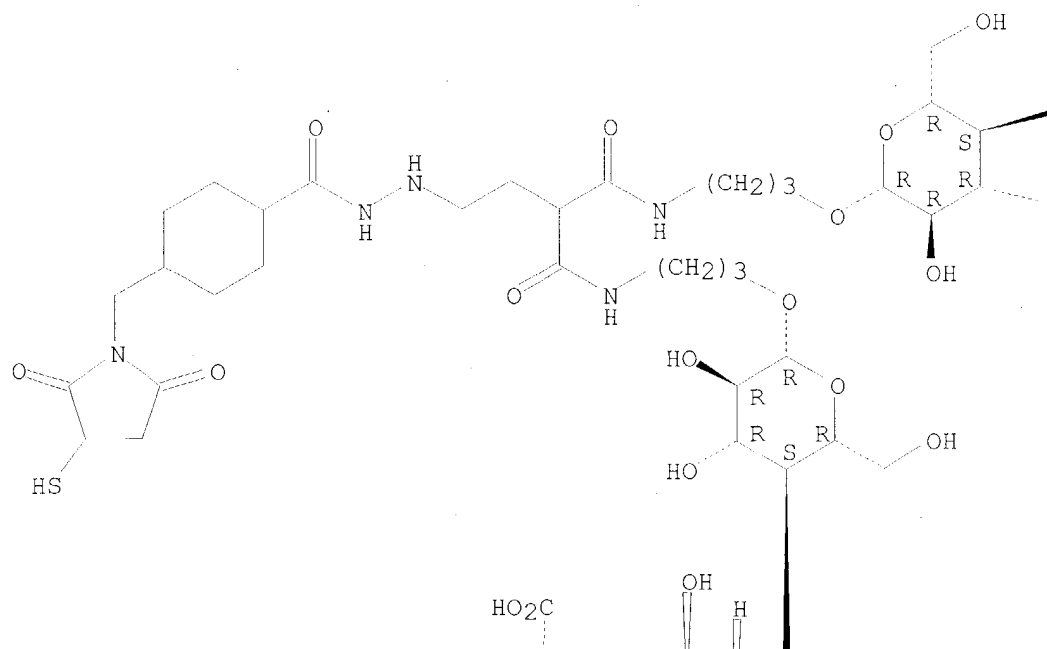
- 1 REFERENCES IN FILE CA (1957 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:13979

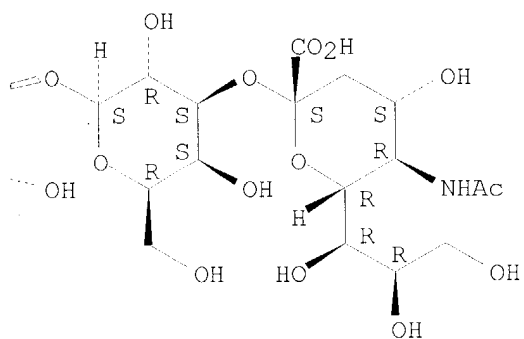
L3 ANSWER 3 OF 10 REGISTRY COPYRIGHT 2003 ACS
 RN 274260-28-5 REGISTRY
 CN Cyclohexanecarboxylic acid, 4-[(3-mercapto-2,5-dioxo-1-pyrrolidinyl)methyl]-, 2-[4-[[3-[[O-(N-acetyl-.alpha.-neuraminosyl)-(2.fwdarw.3)-O-.beta.-D-galactopyranosyl-(1.fwdarw.4)-.beta.-D-glucopyranosyl]oxy]propyl]amino]-3-[[[3-[[O-(N-acetyl-.alpha.-neuraminosyl)-(2.fwdarw.3)-O-.beta.-D-galactopyranosyl-(1.fwdarw.4)-.beta.-D-glucopyranosyl]oxy]propyl]amino]carbonyl]-4-oxobutyl]hydrazide (9CI)
 (CA INDEX NAME)
 FS STEREOSEARCH
 MF C69 H113 N7 O43 S
 SR CA
 LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

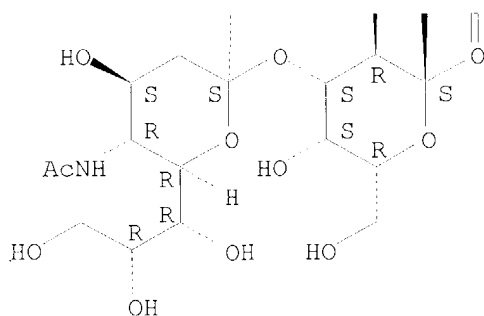
PAGE 1-A



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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

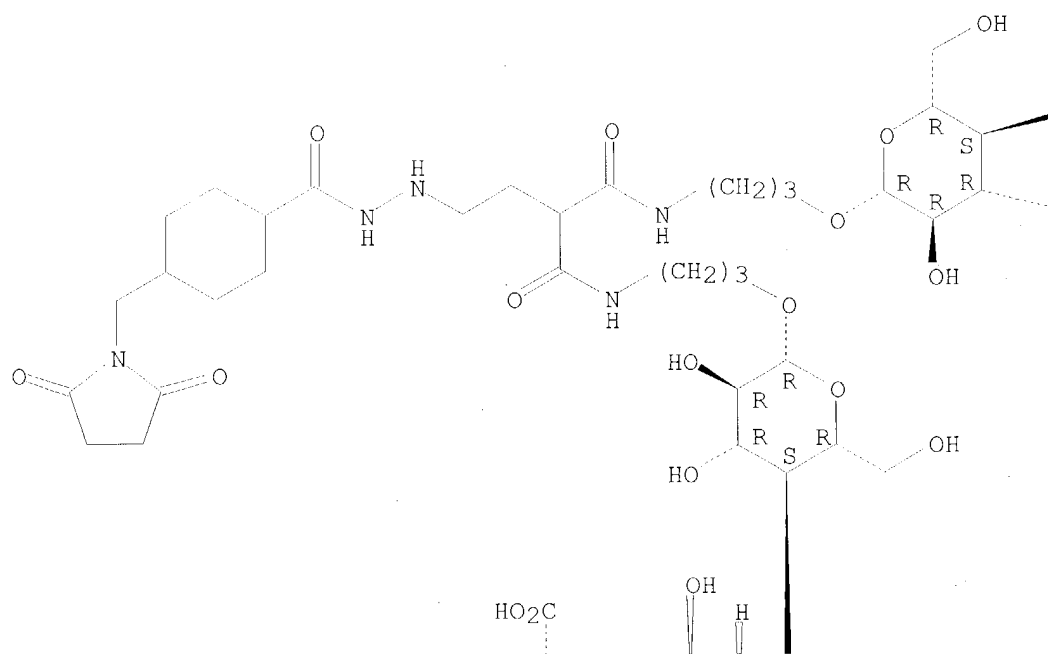
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 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

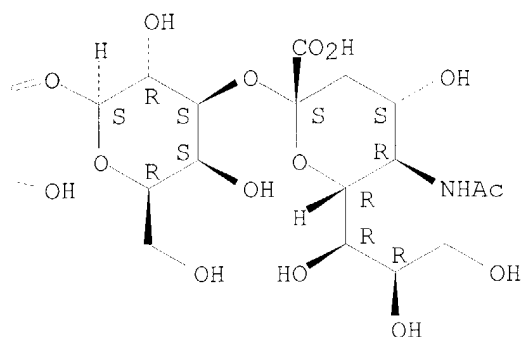
REFERENCE 1: 133:43736

L3 ANSWER 4 OF 10 REGISTRY COPYRIGHT 2003 ACS
 RN 274260-27-4 REGISTRY
 CN Cyclohexanecarboxylic acid, 4-[(2,5-dioxo-1-pyrrolidinyl)methyl]-,
 2-[4-[[3-[[O-(N-acetyl-.alpha.-neuraminosyl)-(2.fwdarw.3)-O-.beta.-D-
 galactopyranosyl-(1.fwdarw.4)-.beta.-D-glucopyranosyl]oxy]propyl]amino]-3-
 [[[3-[[O-(N-acetyl-.alpha.-neuraminosyl)-(2.fwdarw.3)-O-.beta.-D-
 galactopyranosyl-(1.fwdarw.4)-.beta.-D-glucopyranosyl]oxy]propyl]amino]car
 bonyl]-4-oxobutyl]hydrazide (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C69 H113 N7 O43
 SR CA
 LC STN Files: CA, CAPLUS, TOXCENTER

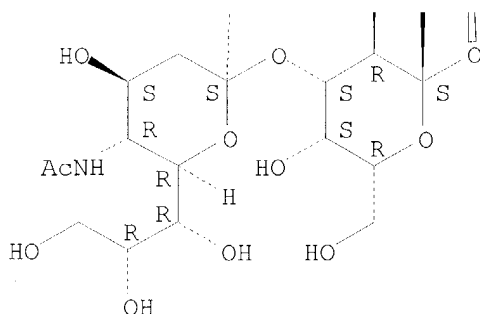
Absolute stereochemistry.

PAGE 1-A





PAGE 2-A

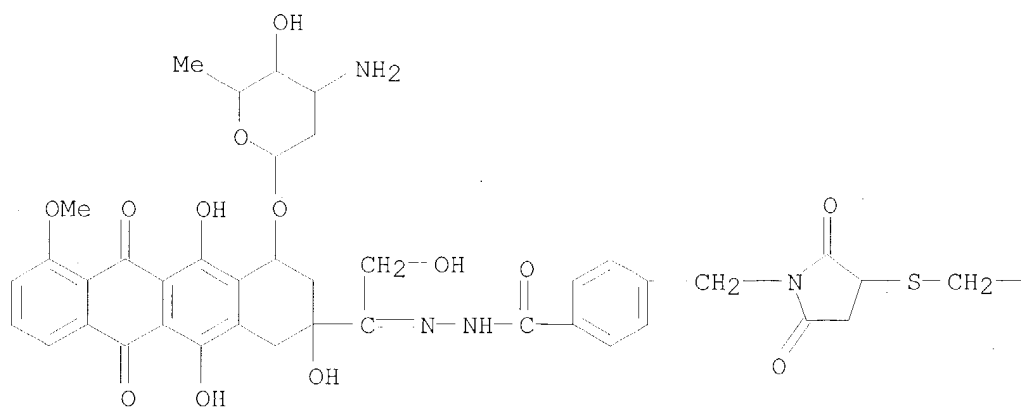


1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

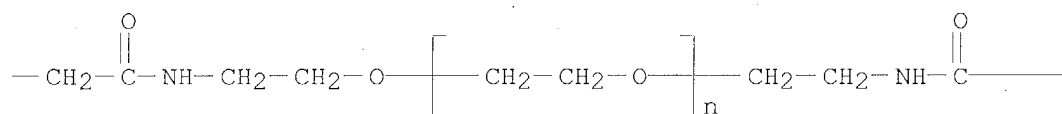
CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[[3-[[1-[[4-[[2-[1-[(2S,4S)-4-[(3-amino-2,3,6-trideoxy-.alpha.-L-lyxo-hexopyranosyl)oxy]-1,2,3,4,6,11-hexahydro-2,5,12-trihydroxy-7-methoxy-6,11-dioxo-2-naphthacenyl]-2-hydroxyethylidene]hydrazino]carbonyl]phenyl]methyl]-2,5-dioxo-3-pyrrolidinyl]thio]-1-oxopropyl]amino]ethyl]-.omega.-[2-[[3-[[1-[[4-[[2-[1-[(2S,4S)-4-[(3-amino-2,3,6-trideoxy-.alpha.-L-lyxo-hexopyranosyl)oxy]-1,2,3,4,6,11-hexahydro-2,5,12-trihydroxy-7-methoxy-6,11-dioxo-2-naphthacenyl]-2-hydroxyethylidene]hydrazino]carbonyl]phenyl]methyl]-2,5-dioxo-3-pyrrolidinyl]thio]-1-oxopropyl]amino]ethoxy]- (9CI) (CA INDEX NAME)

LC STN Files: CA, CAPLUS, TOXCENTER

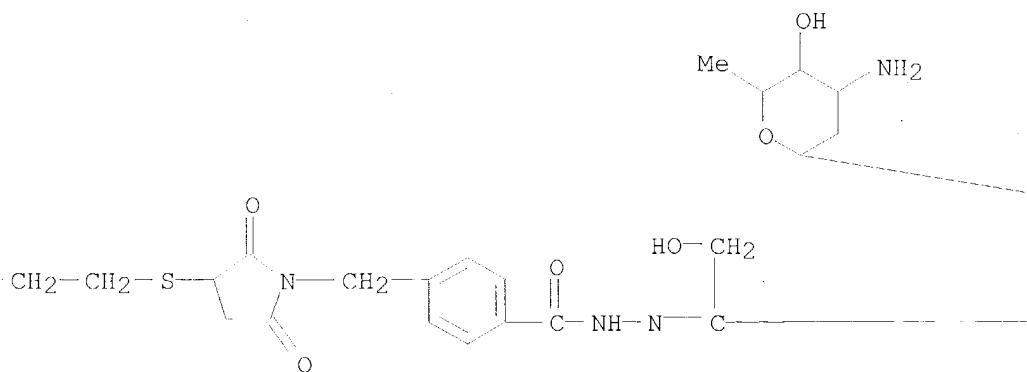
PAGE 1-A



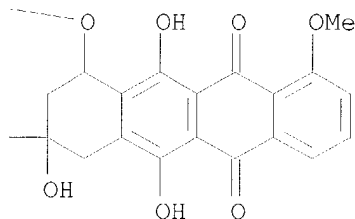
PAGE 1-B



PAGE 1-C



PAGE 1-D



1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 132:170955

L3 ANSWER 6 OF 10 REGISTRY COPYRIGHT 2003 ACS

RN 258844-02-9 REGISTRY

CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-[[3-[[1-[[4-[[2-[1-[(2S,4S)-4-[(3-amino-2,3,6-trideoxy-.alpha.-L-lyxo-hexopyranosyl)oxy]-1,2,3,4,6,11-hexahydro-2,5,12-trihydroxy-7-methoxy-6,11-dioxo-2-naphthacenyl]-2-hydroxyethylidene]hydrazino]carbonyl]phenyl]methyl]-2,5-dioxo-3-pyrrolidinyl]thio]-1-oxopropyl]amino]ethyl]-.omega.-methoxy- (9CI) (CA INDEX NAME)

MF (C2 H4 O)n C45 H51 N5 O15 S

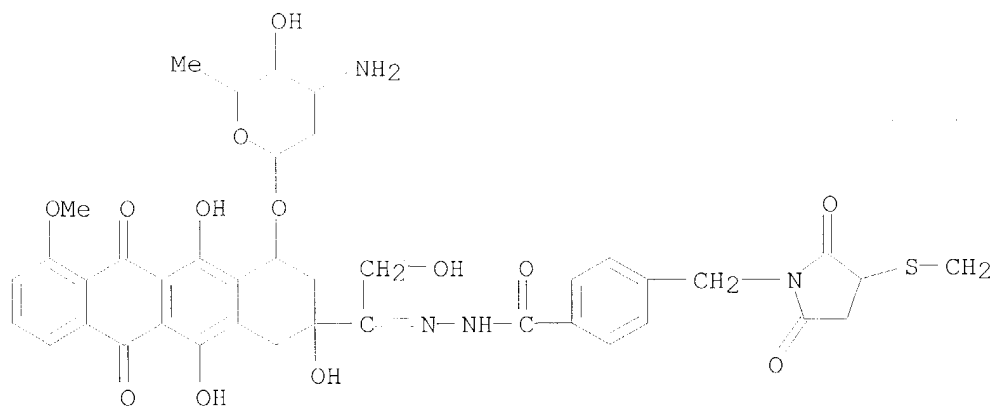
CI PMS

PCT. Polyether

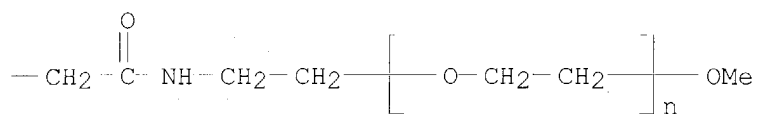
SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

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1 REFERENCES IN FILE CA (1957 TO DATE)

1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 132:170955

L3 ANSWER 7 OF 10 REGISTRY COPYRIGHT 2003 ACS

RN 207503-53-5 REGISTRY

CN L-Serinamide, N-acetyl-O-[2-(acetyl-amino)-6-O-(N-acetyl-.alpha.-neuraminosyl)-2-deoxy-.alpha.-D-galactopyranosyl]-L-seryl-O-[2-(acetyl-amino)-6-O-(N-acetyl-.alpha.-neuraminosyl)-2-deoxy-.alpha.-D-galactopyranosyl]-L-seryl-O-[2-(acetyl-amino)-6-O-(N-acetyl-.alpha.-neuraminosyl)-2-deoxy-.alpha.-D-galactopyranosyl]-N-[2-[2-[2-[[4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]cyclohexyl]carbonyl]hydrazino]ethoxy]ethyl]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

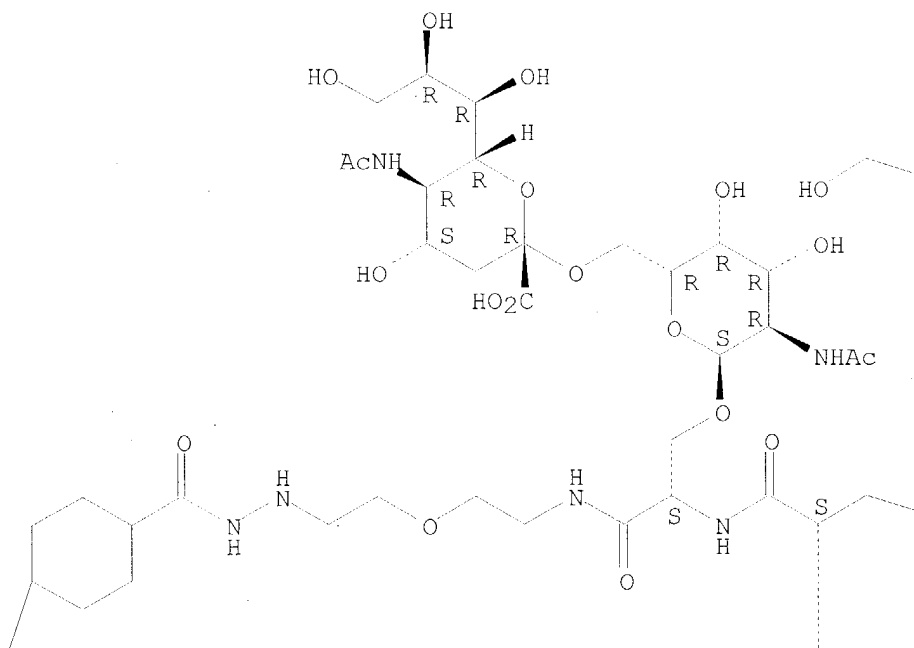
MF C84 H133 N13 O50

SR CA

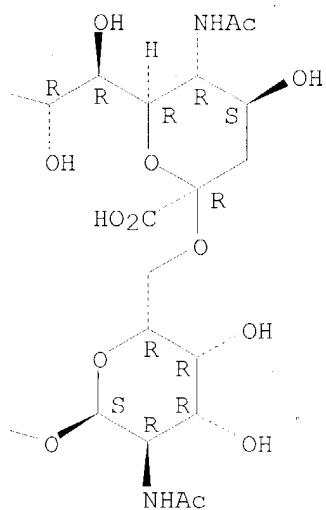
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

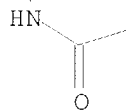
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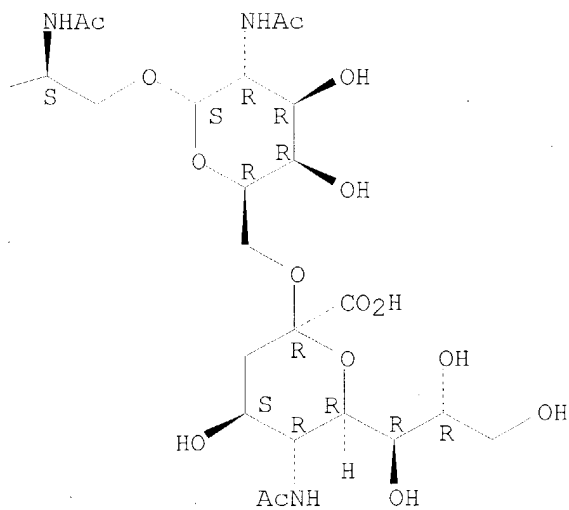
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PAGE 2-A



PAGE 2-B

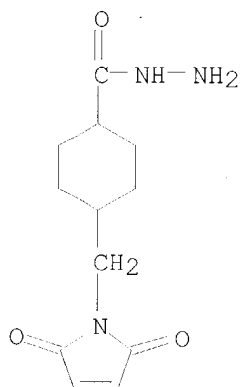


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1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 129:3682

L3 ANSWER 8 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN 181148-00-5 REGISTRY
CN Cyclohexanecarboxylic acid, 4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]-, hydrazide (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H17 N3 O3
CI COM
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1957 TO DATE)
4 REFERENCES IN FILE CAPLUS (1957 TO DATE)

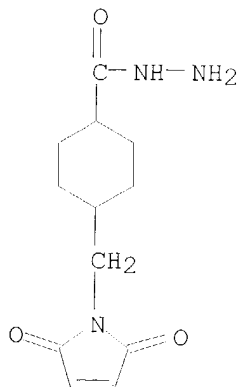
REFERENCE 1: 136:400166

REFERENCE 2: 131:143211

REFERENCE 3: 128:203897

REFERENCE 4: 125:189998

L3 ANSWER 9 OF 10 REGISTRY COPYRIGHT 2003 ACS
RN 174422-72-1 REGISTRY
CN Cyclohexanecarboxylic acid, 4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]-, hydrazide, monohydrochloride (9CI) (CA INDEX NAME)
MF C12 H17 N3 O3 . Cl H
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
CRN (181148-00-5)



● HCl

5 REFERENCES IN FILE CA (1957 TO DATE)
5 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:41770

REFERENCE 2: 132:127703

REFERENCE 3: 129:3682

REFERENCE 4: 128:152804

REFERENCE 5: 124:212048

L3 ANSWER 10 OF 10 REGISTRY COPYRIGHT 2003 ACS

RN 129506-88-3 REGISTRY

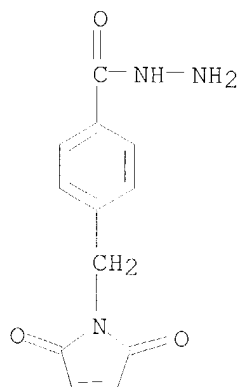
CN Benzoic acid, 4-[(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)methyl]-, hydrazide
(9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C12 H11 N3 O3

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 113:148405

